#### USAF School of Aerospace Medicine & Defense Health Agency

# DoD Global, Laboratory-Based, Influenza Surveillance Program

#### 2015-2016















# Cumulative ResultsLocations63Collected675Tested616

Influenza A	8
A(H1N1)pdm09	1
A(H3N2)	7
A/not subtyped	0

Influenza B*	5
В	5

Other Respiratory	
Pathogens	199
Adenovirus	32
Bordetella pertussis	1
Chlamydophila pneumoniae	0
Coronavirus	5
Human Metapneumovirus	1
Mycoplasma pneumoniae	17
Parainfluenza	50
RSV	11
Rhino/Enterovirus	63
Non-influenza Co-infections	19

Results are preliminary and may change as more results are received.
\*Influenza B lineages will be reported in the periodic molecular sequence reports.

Lab data are current as of 7 December 2015.

### Respiratory Highlights 22 November - 5 December 2015 (Surveillance Weeks 47 & 48)

- During 22 November 5 December 2015, a total of 142 specimens were collected and received from 39 locations. Results were finalized for 95 specimens from 32 locations. Two influenza B viruses and one influenza A(H1N1) were identified in Week 48.
- During Week 47 (22 28 November 2015), influenza activity increased slightly in the United States but remained low overall. <u>Viral Surveillance:</u> The most frequently identified influenza virus type reported by public health laboratories in Week 47 was influenza A, with influenza A(H3N2) viruses predominating. <u>Outpatient Illness Surveillance:</u> The proportion of outpatient visits for influenza-like illness (ILI) was 1.9% which is below the national baseline of 2.1%. <u>Geographic Spread of Influenza:</u> The geographic spread of influenza in Guam was reported as widespread; two states reported local activity; Puerto Rico reported regional activity; seven states reported local activity; the District of Columbia, the U.S. Virgin Islands, and 38 states reported sporadic activity; and five states reported no influenza activity (CDC FluView Week 47, cited 8 December 2015).

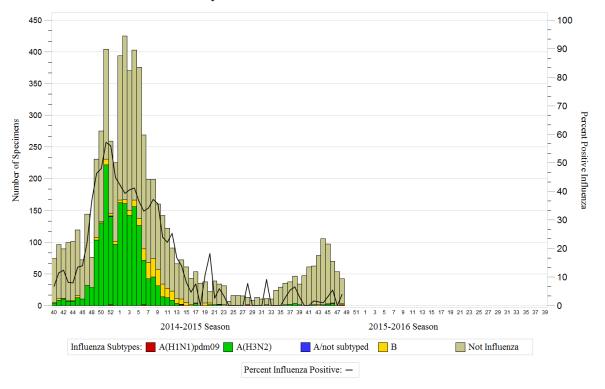
**Table 1.** Results by region and location for specimens collected during Weeks 47 & 48

Region*		A(H1N1)pdm09	В	Adenovirus	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & Rhino/Entero	B. pertussis & Para	Corona & Rhino/Entero	M. pneumo & Rhino/Entero	No Pathogen	Total
PACOM	Kadena AB, Japan	-	-	-	-	-	-	-	-	-	-	-	1	1
	Osan AB, South Korea	-	-	-	-	-	-	-	-	-	-	-	1	1
Region 1	Hanscom AFB, MA	-	-	-	-	1	-	-	-	-	-	-	2	3
Region 2	JB McGuire-Dix-Lakehurst, NJ	-		-		-	-		-	-	-		1	1
D : 2	USMA - West Point, NY	-	-	-	-	-	-	-	-	-	-	-	2	2
Region 3	JB Langley-Eustis, VA	-	-	-	-	3	-	1	-	-	-	-	-	4
	NMC Portsmouth, VA	-	-	-	1	-	-	-	-	-	-	-	-	1
Region 4	Columbus AFB, MS	-		-		-	-	-	-	-	-		3	3
	Eglin AFB, FL	-	-	2	-	-	-	-	-	-	-	-	-	2
	Ft Bragg, NC	-	-	-	-	-	1	-	-	-	-	-	1	2
	Ft Campbell, KY	-	-	-	-	-	-	-	-	-	-	-	1	1
	Hurlburt Field, FL	-	-	-		-	-		-	_		-	1	1
	Maxwell AFB, AL	-	-	-	-	-	-	1	-	-	-	-	-	5
	Moody AFB, GA NH Jacksonville, FL	-	1	2		-	-	1		-	-		1	1
		-	-	-	-	-	-	-	-	-	-	-	2	3
	Robins AFB, GA Shaw AFB, SC	-	_	_		_	1			_		1	_	1
D		-	-	-	-	-	-	-	-	-	-	_	2	_
Region 5	Scott AFB, IL Wright-Patterson AFB, OH	-	-		-	-	-	1	-	-	-	-	-	1
Region 6	Cannon AFB, NM	-				-			-	-	-		1	1
Region o	Laughlin AFB, TX	-				-			-	-	-		1	1
	Sheppard AFB, TX	-	1	-	1	-	-	1	-	-	1	-	4	8
	Vance AFB, OK	-		-		-	-		-	-	-	-	2	2
Region 7	McConnell AFB, KS	-	÷	-	1	1	-	1	-	1	-	÷	4	8
region /	Offutt AFB, NE	-	-	-		-		1	-	-	-	-	-	1
Region 8	Ellsworth AFB, SD	-	-	-	-	-	-	-	-	-	-	-	2	2
	FE Warren AFB, WY	-	-	-	-	1	-	-	-	-	-	-	1	2
	Hill AFB, UT	-	-	-	-	-	-	3	-	-	-	-	2	5
	Peterson AFB, CO	-	-	-	-	-	-	-	-	-	-	-	1	1
Region 9	Davis-Monthan AFB, AZ	-	-	-	-	-	-	-	-	-	-	-	2	2
	Nellis AFB, NV	1	-	1	-	3	-	1	1	-	-	-	4	11
	Travis AFB, CA	-	-	1	-	2	-	6	-	-	-	-	6	15
Total		1	2	6	3	11	2	17	1	1	1	1	49	9:

\*CONUS locations are based on Health & Human Services regions. Other locations are defined by COCOM.

#### **Laboratory Results - Cumulative for Season**

**Graph 1.** Percent influenza positive by week: 2014-2015 surveillance year and through Week 48 of the 2015-2016 surveillance year



Note: Dual influenza co-infections are excluded from this graph. Specimens with pending results are used in the denominator to calculate percent positive, but are not displayed in the graph.

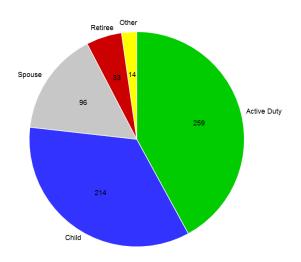
**Table 2.** ILI by age group for the 2015-2016 surveillance year through Week 48

Age Group	Frequency	Percent
0-5	135	21.92
6-9	34	5.52
10-17	46	7.47
18-24	115	18.67
25-44	218	35.39
45-64	55	8.93
65+	13	2.11

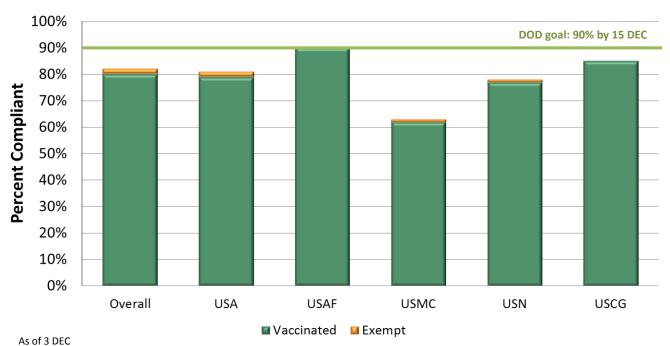
**Demographic Summary** 

Of 616 ILI cases, 259 are service members (42.1%), 214 are children (34.7%), 96 are spouses (15.6%), and 47 (7.6%) are retirees and other beneficiaries. The median age of ILI cases with known age (n=616) is 23  $(range\ 0,\ 91)$ .

**Graph 2.** ILI by beneficiary status for the 2015-2016 surveillance year through Week 48



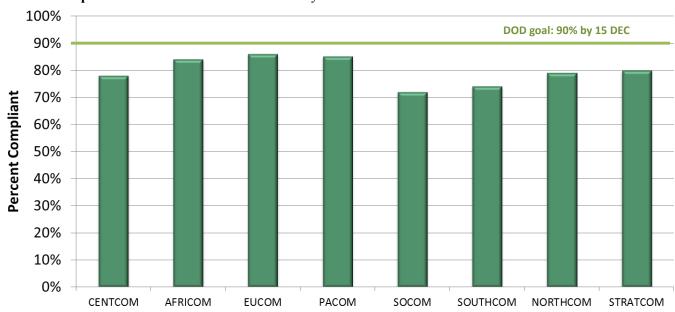
Graph 3. Influenza Immunization Status by Service



No exemptions noted reflect less than 1% of force exempted

Data Sources: Army - MEDPROS, Air Force - ASIMS, Navy, Marine Corps & Coast Guard – MRRS

Graph 4. Influenza Immunization Status by Combatant Command

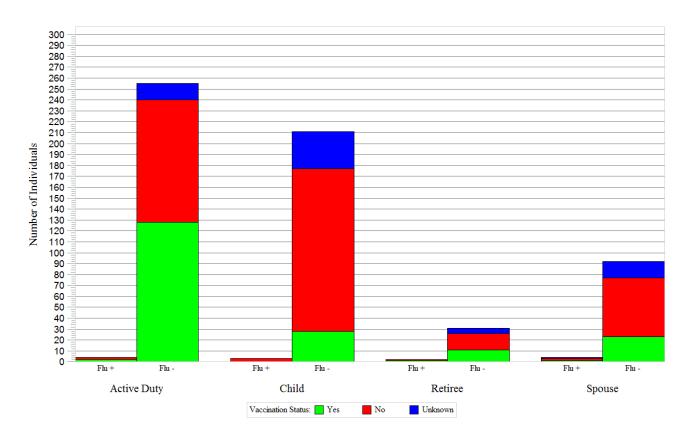


% Compliant = Vaccinated + Exemptions

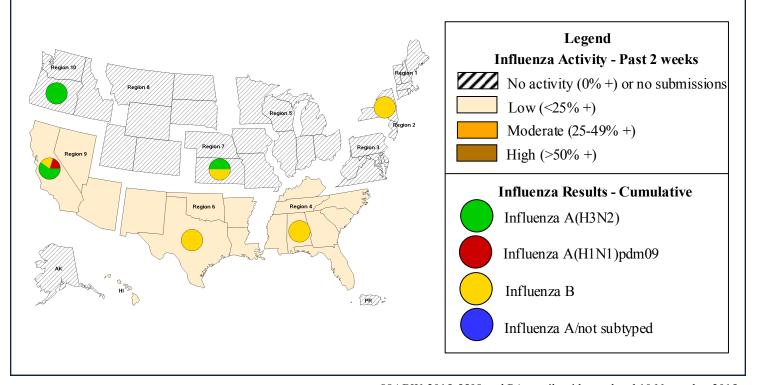
Data Source: DMDC & DEERS; IMZ data as of 1 DEC; personnel data as of 1 DEC; AFRICOM HQ personnel in Europe included in AFRICOM total.

Courtesy of DHA Immunizations Healthcare Branch

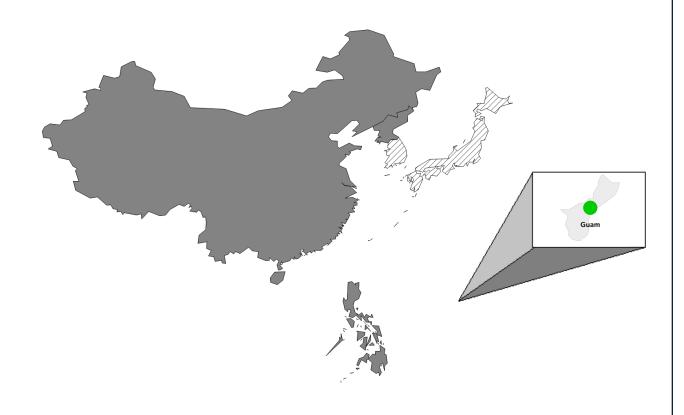
Graph 5. Vaccination status by beneficiary type for the 2015-2016 surveillance year through Week 48



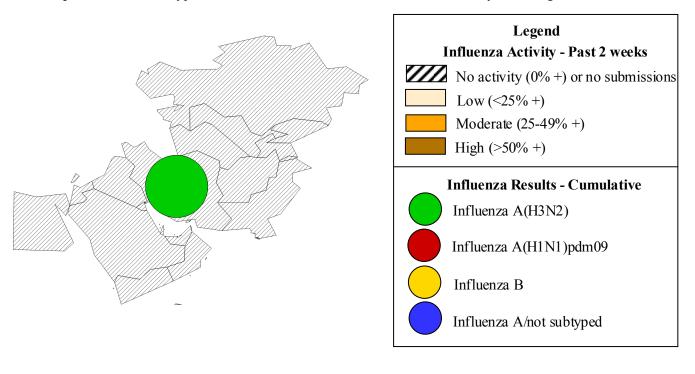
Map 1. Influenza subtypes and activity level by region for the 2015-2016 surveillance year through Week 48



Map 2. Influenza subtypes by country for the 2015-2016 surveillance year through Week 48 (Pacific)



Map 3. Influenza subtypes for CENTCOM for the 2015-2016 surveillance year through Week 48



#### **Laboratory Results—Through Current Surveillance Week 48**

Table 3. Cumulative results by region and location for specimens collected during the 2015-2016 surveillance year

Region*		A(H1N1)pdm09	A(H3N2)	В	Adenovirus	B. pertussis	Coronavirus	hMNV	M. pneumoniae	Parainfluenza	RSV	Rhinovirus/Enterovirus	Non-Influenza Co-Infection	No Pathogen	Total
PACOM	CFA Okinawa, Japan	ì	1	·			·	·		·		·	·	1	1
	Eielson AFB, AK	-	1	-	-	-	-	-	-	-	-	-	-	3	4
	JR Marianas - Andersen AFB, Guam Kadena AB, Japan	-	1	-	-		-	-		-	-	2	1	7	9
	Misawa AB, Japan	÷		-	-		-			-	1	2	-	3	6
	Osan AB, South Korea	-	-	-	-		-	-		-	-	-	-	1	1
	Yokota AB, Japan	-	٠	-	-	٠	-	٠	1	٠	1	•	-	5	7
Region 1	Hanscom AFB, MA	-	-	-	1		-	-		2	-	-	-	5	8
	NHCNE Newport, RI	-	-	-	-		-	-		-	-	1	-	1	2
Region 2	USCG Acade my, CT Ft Drum, NY	-	-	-	-	-	-	-	-	-	-	1	-	3	4
Region 2	JB McGuire-Dix-Lakehurst, NJ	÷	-	-	-	-	-	-	-	-	-	4	-	2	6
	USMA - West Point, NY		-	1	1		-		1	1	1	÷	1	33	39
Region 3	Dover AFB, DE	-		-	-		-			•	-		-	3	3
	JB Anacostia-Bolling, DC		-	-	-		-	٠	-		-	-	-	1	1
	JB Andrews, MD	Ŀ	1	-	-	1	-	1	1	•	-	1	-	-	1
	JB Langley-Eustis, VA	Ŀ	-	-	1	-	-	-	-	3	1	2	-	1	8
Region 4	NMC Portsmouth, VA CGS Mobile, AL	-		-	1	-	-	-	3	1	-	2	1	11	19 1
Kegion 4	Columbus AFB, MS	÷	Ė	-	-	Ė	-	Ė	Ė	Ė	-	Ė	-	9	9
	Eglin AFB, FL	-	-	-	3	-	-	-	-	3	-	-	-	5	11
	Ft Bragg, NC		-	-	1		-	-		-	1	-	-	9	11
	Ft Campbell, KY	-	٠		-	٠		٠	٠	2	-	3		10	15
	Hurlburt Field, FL	-	-	-	-	-	-	-	-	٠	-	-	1	2	3
	Keesler AFB, MS	-		-	-	-	-	-	1	-	-	1	-	11	13
	MacDill AFB, FL Maxwell AFB, AL	-	-	-	-	-	-	-		1	1	1	-	9	3 12
	Moody AFB, GA	÷	Η.	1	4	Ė	1	-	Ė	2	1	4	1	8	22
	NH Jacksonville, FL	-	-		2	-		-	-	Ė	1	-		2	5
	Robins AFB, GA	-	1	-	-	ŀ	-	ŀ	1	1	1	1	-	4	7
	Seymour Johnson AFB, NC	-		-	1	1	-	1	1	٠	-	1	-	-	1
	Shaw AFB, SC	Ŀ	-	-	-		-	-	2	-	-	2	1	2	7
D ' 5	Tyndall AFB, FL	-	٠	-	-	•	1		•	٠.	-	-	1	1	3
Region 5	Scott AFB, IL Wright-Patterson AFB, OH	-	-	-	1		-	-	-	1	-	2	-	9	11 4
Region 6	Altus AFB, OK	÷	-	-	-	-	-	-	-	2	-	-	-	13	15
	Barksdale AFB, LA	-	-	-	-	-	-	-	-		-	-	-	1	1
	Cannon AFB, NM	-		-	1		-	-		-	-	1	-	10	12
	Laughlin AFB, TX	-	٠	-	-	٠	1	٠	٠	٠	-	٠	-	2	3
	Little Rock AFB, AR	-	٠	-	-		1			٠	-	-	-	2	3
	Sheppard AFB, TX	-	-	1	1	-	-	1	2	1	-	5	1	28	40
	Tinker AFB, OK Vance AFB, OK	1	-	-	-	-	-	÷	1	3	-	-	4	13 20	23
Region 7	Ft Leavenworth, KS			1	-		-				-	1	-	8	10
Ŭ	McConnell AFB, KS	-	1	-	-	-	-	-	2	1	-	2	1	13	20
	Offutt AFB, NE	-	٠	-	1	٠	-	٠	٠	1	-	1	-	15	18
Region 8	Ellsworth AFB, SD	-		-	1	-	-	-	1	٠	-	-	-	12	14
	FE Warren AFB, WY	·	Ŀ	-	-	1	-	-		1	-	2	-	7	11
	Hill AFB, UT Malmetrom AFR MT	-	-	-	1	-	-	-	1		-	1	-	18	24
	Malmstrom AFB, MT Minot AFB, ND	1	Ė	-	-	-	-	-	-	1	-	-	-	-	1
	Peterson AFB, CO	-	-	-	1	-	-	-	-	-	-	-	-	3	4
	USAF Acade my, CO		-	-	-	-	-	-	-	3	-	1	-	9	13
Region 9	Davis-Monthan AFB, AZ	-	-	-	-		-		-	-	-		-	4	4
	Edwards AFB, CA	ŀ	-	-	-	1	-	-	-	•	-		-	3	3
	Luke AFB, AZ	-	-	-	-		-	-	Ŀ	-	-	-	-	2	2
	Nellis AFB, NV	1	2	1	6	-	-	-	-	6	1	4	2	13	36
	Travis AFB, CA USCG Island Alameda, CA	-	1	-	2	-	-	-	-	3	-	6	2	17 2	2
	Vandenberg AFB, CA	Ė	-	-	-	-	-	-	-	-	-	-	-	3	3
Region 10	Mt Home AFB, ID	-	-	-	-		-		-		-	-	-	3	3
	NH Bremerton, WA	Ŀ	1	-	1	1	1		1	9	-	6	2	17	37
Total		1	7	5	32	1	5	1	17	50	11	63	19	404	616

\*CONUS locations are based on Health & Human Services regions. Other locations are defined by COCOM.

## Monthly EUCOM Respiratory Surveillance Supplemental Report Through 5 December 2015

In cooperation and agreement with U.S. Army Public Health Command Region-Europe (PHCR-E), the DoD Global, Laboratory-based, Influenza Surveillance Program has analyzed data from surveillance sites that submit specimens to Landstuhl Regional Medical Center (LRMC), Germany. LRMC's laboratory is the forward laboratory for military sites in Europe.

Lab results are preliminary and may change as more results are received.

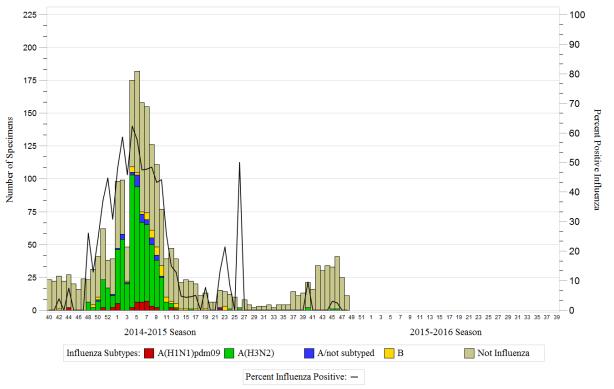
**Table 4.** Results by region and location for specimens collected and finalized during Weeks 45-48

Region		A(H3N2)	A(H3N2) & Rhino/Entero	hMNV	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & Rhino/Entero	hMNV & Rhino/Entero	Para & Rhino/Entero	RSV & Rhino/Entero	No Pathogen	Total
Deployed	Country 6, Location A	1	-	-	1	-	-	-	-	-	-	2	3
EUCOM	Incirlik AB, Turkey	ı	1	ı	ı	-	1	ı	ı	-	ı	1	3
	Landstuhl RMC, Germany	•	-	1	1	-	4	1	-	-	1	16	21
	NAVSTA Rota, Spain	-	-	-	1	-	-	-	-	-	-	1	2
	NSA Naples, Italy	-	-	-	-	-	1	-	-	-	-	3	4
	RAF Lakenheath, England	-	-	2	4	11	16	-	1	-	13	9	56
	Ramstein AB, Germany	-	-	-	1	-	3	-	-	-	-	-	3
	USAG Stuttgart, Germany	-	-	-	1	-	2	-	1	-	-	2	6
	USAG Vicenza, Italy	-	-	-	-	-	2	-	-	-	-	1	3
	Vilseck AHC, Germany	-	-	1	2	1	2	1	-	1	-	2	9
Total		1	1	2	9	12	31	1	2	1	13	37	110

**Table 5.** Cumulative results by region and location for specimens collected during the 2015-2016 surveillance year

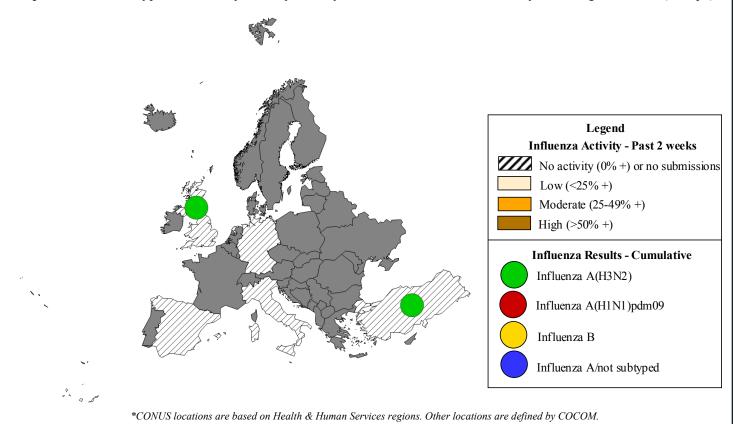
Region		A(H3N2)	A(H3N2) & Rhino/Entero	Adenovirus	hMNV	Parainfluenza	RSV	Rhinovirus/Enterovirus	Adeno & Rhino/Entero	hMNV & Rhino/Entero	Para & Rhino/Entero	RSV & Rhino/Entero	No Pathogen	Total
Deployed	Country 6, Location A	1	-	-	-	-	-	4	-	-	-	-	4	9
EUCOM	Aviano AB, Italy	-	-	-	-	-	-	-	-	-	-	-	1	1
	Incirlik AB, Turkey	-	1	-	-	1	-	2	-	-	-	-	2	6
	Landstuhl RMC, Germany	-	-	-	-	6	-	11	-	-	-	-	35	52
	NAVSTA Rota, Spain	-	-	-	-	2	-	1	-	-	-	-	2	5
	NSA Naples, Italy	-	-	1	-	1	-	2	-	-	-	-	6	9
	RAF Lakenheath, England	2	-	1	2	7	17	29	-	1	1	16	31	107
	Ramstein AB, Germany	-	-	-	-	2	-	4	-	-	-	-	-	6
	USAG Stuttgart, Germany	-	-	-	-	3	1	9	-	1	-	-	11	25
	USAG Vicenza, Italy	-	-	-	-	-	-	3	-	-	-	-	4	7
	Vilseck AHC, Germany	-	-	-	-	3	1	4	1	-	1	-	8	18
Total		3	1	1	2	25	19	69	1	2	2	16	104	245

**Graph 6.** Percent influenza positive by week: 2014-2015 surveillance year and through Week 48 of the 2015-2016 surveillance year



Note: Dual influenza co-infections have been excluded from the graph.

**Map 4.** Influenza subtypes and activity level by country for the 2015-2016 surveillance year through Week 48 (Europe)



DoD Global, Laboratory-Based, Influenza Surveillance Program https://gumbo2.wpafb.af.mil/epiconsult/influenza/index.cfm

> For Public Health Services 937-938-3196; DSN 798-3196

> For Laboratory Services 937-938-3163; DSN 798-3163

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